

NOTES ON CEYLON LAND-SHELLS, WITH DESCRIPTIONS OF NEW SPECIES OF *CYATHOPOMA* AND *THYSANOITA*.

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PLATE X.

THE species of *Cyathopoma* hitherto recorded from Ceylon are :

<i>C. Ceylanicum</i> , Beddome.	<i>C. album</i> , Beddome.
<i>C. Mariæ</i> , Jousseau.	<i>C. Prestoni</i> , Sykes.
<i>C. artatum</i> , Sykes.	<i>C. turbinatum</i> , Sykes.
<i>C. leptomita</i> , Sykes.	

The occurrence of *C. album* is doubtful. I am now able to add two more species, which owe their discovery to the energy of Mr. Collett, who has also found "among lichens, Lower Ambagamuwa, at 2,500 feet," a form, which I think it wisest, considering the little we know of the specific variation of the present genus, to regard for the present as a large variety of *C. Prestoni*. This new variety differs from the type in its greater size, having an additional whorl, more elevated form, and in the more strongly marked spiral sculpture, the liræ also being more numerous; the periostracum, too, is thicker, and, under a lens, gives an obsoletely decussated appearance to the shell.

1. *CYATHOPOMA CONOIDEUM*, n.sp. Pl. X, Figs. 3a-c.

Testa dextrorsa, valde elevata, trochoidalis, mediocriter et perspective umbilicata, periostraco brunneo induta, apice acutulo; anfr. 7, lente accrescentes, plano-convexi, primi læves, reliqui obsolete spiraliter lirati, ultimus liris duabus, unica in medio, altera infra, ornatus, fere lævis in regione umbilicari; sutura valde impressa; apertura subcircularis, basi recedens, continua, peristomate leviter incrassato. Alt. 2.6, lat. 1.5 mm.

Hab. — Among fern-roots and under rocks, Binoya, Watawala (O. Collett).

A very interesting form, remarkable for its trochoid shape (it is almost turreted in form, owing to the deeply impressed suture) and obsolete spiral liræ. Unfortunately the specimens are not in very good condition. A smaller specimen, in better condition than the type, is also figured (Fig. 3c).

2. *CYATHOPOMA COLLETTI*, n.sp. Pl. X, Figs. 1a-c.

Testa dextrorsa, elevata, pyramidalis, mediocriter et perspective umbilicata, cornea, strigis castaneis obliquis picta; anfr. 4½, convexi, regulariter accrescentes, primi læves, reliqui spiraliter lirati, ultimus

duabus liris, unica ad peripheriam, altera basali, ornata, in regione umbilicari lævi impressa; sutura impressa; apertura subcircularis. Diam. max. 1.1, alt. 1 mm.; spec. maj. diam. 1.5, alt. 1.2 mm.

Hab.—Amongst moss on Eton estate, Punduloya, at 4,000 feet (O. Collett).

This species may easily be separated from the other known species of Ceylon by the fact that it is smooth save for the two distinct spiral liræ on the last whorl, of which only one appears on the earlier whorls, and by the difference in its coloration.

The operculum is very remarkable: seen from without it appears as a ring of foliaceous laminæ standing up and surrounding a deep central pit.

This species may be the *Jerdonia trochlea* of Hanley & Theobald,¹ but not that of Benson,² figured by Pfeiffer³ from a specimen belonging to H. Benson. The two figures represent quite distinct species, and as Pfeiffer's was taken from a Bensonian specimen, it is the more likely one to be correct.

3. THYSANOTA HISPIDA, n.sp. Pl. X, Figs. 2a-c.

Testa trochiformis, periostaco fusco, rugoso, induta, basi impressa, umbilicus angustus, pervius; apex mediocris, applanatus; anfr. 6-6½, convexi, lira unica spiraliter sculpti, ultimus basi carinatus, lira carinaque pilis longis dense notatæ, apertura lata, lunaris; peristoma simplex, marginibus callo tenuissimo junctis. Diam. max. 8, alt. 5 mm.

Hab.—Hapatule, at 4,500 feet, Ceylon (O. Collett).

This species appears to be closely related to *Thysanota Guerini*, Pfr., from the Nilgherries, but differs somewhat in shape, as also in size; the single spiral thread clothed with club-shaped hairs (Fig. 2c) is specially noteworthy. The basal carination is continued, and marks the suture of the upper whorls.

4. *HELIX BICILIATA*, Pfr.—Practically all that we know of the *Helix biciliata*, Pfr., is contained in his original description;⁴ there are also the figures given by Hanley & Theobald.⁵ Pfeiffer records the habitat as 'Ceylon,' and refers to 'coll. Skinner.' As this collection passed into the hands of Miss Linter, I inquired if she possessed the species: she kindly informed me that no trace of it could be found in the catalogue of the collection.

Recently I have had from Mr. Collett two very interesting specimens, in good condition, which I refer to this species. Provided we assume that when Pfeiffer speaks of "carinis duabus," one may be almost in the suture, they agree fairly well with his diagnosis, save that on examining the base under a lens, I find palatal and

¹ Conch. Ind., pl. cxxxv, figs. 5, 6.

² Ann. & Mag. Nat. Hist., ser. II, vol. viii (1851), p. 189.

³ Conch. Cab., *Cyclostomacea*, p. 380, pl. xlix, figs. 29, 30.

⁴ Proc. Zool. Soc., 1855, p. 112 (cf. Mon. Helic. Viv., iv, p. 68).

⁵ Conch. Ind., pl. clx, figs. 1, 4.

